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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/682,657  
Filing Date: October 09, 2003  
Appellant(s): POLONKA, JACK

\_\_\_\_\_  
Edward A. Squillante Jr.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 11, 2009 appealing from the Office action mailed May 5, 2009

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(8) Evidence Relied Upon**

500937	Grollier et al.	3-1991
5205837	Andrean et al.	4-1993
20020176833	Nagatani et al.	11-2002
20030157041	Dreher	8-2003
6511672	Tan et al.	1-2003

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13 and 15-24 rejected under 35 U.S.C. 102(b) as being anticipated by Grollier et al. (US 5000937) as evidenced by Andrean et al. (5205837).

Grollier et al. discloses transparent cosmetic composition for protecting the human epidermis against infrared radiation, which comprises, in a cosmetically acceptable vehicle, an effective amount of at least one substance that reflects infrared radiation, dispersable in said vehicle, possessing a reflectance (R) of infrared radiation equal to at least 45%, and of which a 2% strength dispersion in vaseline possesses an optical transmission in the visible of at least 85%, selected from the group consisting of diatomite, hollow glass microspheres of particle size less than 100 microns, bismuth oxychloride of particle size less than 75 microns, and zirconium powder-covered ceramic microparticles of particle size less than 8 microns (claim 1). The transparent cosmetic contains 1 to 3% by weight, based on the total weight of the composition, of at least one infrared-reflecting agent (claim 6), in the form of a suspension or dispersion in

solvents or fats, in the form of an emulsion or in the form of an ointment, a gel, a solid stick, or an aerosol. The form of a water-in-oil emulsion comprises in addition to the infrared-reflecting agent, fatty alcohols, fatty acid esters, fatty acids, lanolin, natural or synthetic oils or waxes, and emulsifiers, in the presence of water (claims 10 and 12). The bismuth oxychloride have an average particle size 6 to 15 microns, sold by the company MALLINCKRODT under the name "PEARL GLO."

Andrean et al. teaches "PEARL GLO" are lamellar (thin plate-like) in structure.

Products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present, hence meeting the limitations of claims 1, 16, and 23-24.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grollier et al. (US 500937) and Andrean et al. (5205837), as discussed in claims 1-13 and 15-24 above.

Grollier et al. (US 500937) and Andrean et al. are as discussed above.

Although, Grollier et al. does not teach the specific benefit agents of claim 14, the reference does teach linoleates for the purpose of promoting oil retention; salicylates

useful as UV screening agents capable of being used in the transparent cosmetic composition according to the invention.

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to incorporate the specific benefit agents. One having ordinary skill in the art would have been motivated to do this to obtain the desired oil retention and UV screening properties of the composition as suggested by Grollier et al. Hence, a skilled artisan would have reasonable expectation of successfully producing a composition with similar efficacy and results.

Claims 1-3, 5-9, 11-13, 15-17, 19-20 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatani et al. (US 2002/0176833).

Nagatani et al. teach pigmented and non-pigmented cosmetic compositions containing 0.1-30% by wt. of hollow plate metal oxide particles A (e.g. zirconium oxide) having an average particle diameter of 5-12  $\mu\text{m}$  and 0.01-99% by wt. of inorganic particles B (e.g. aluminum oxide, barium sulfate or boron nitride), having platy structure and a refractive index (RI) of 1.6 to 1.8 and a total transmittance of at least 85%. See [0016]-[0018], [0025], [0026], [0031], [0034], Examples. The compositions of Nagatani et al. have "an excellent feeling of transparency". See Abstract; Examples. The compositions contain other conventional cosmetic ingredients such as oil substances, antioxidants, moisturizers, surfactants, perfumes, etc. See [0049]-[0051]; Examples.

Nagatani et al. does not explicitly teach the claimed opacity of the composition of less than about 20%, or a smooth crystal facet surface.

However, the compositions of Nagatani et al. have "an excellent feeling of transparency", "brightness," "natural finish," and are fine and smooth. See above. Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to determine an optimal or workable opacity and smoothness of the composition by routine experimentation. One having ordinary skill in the art would have been motivated to do this to obtain the desired transparency, natural finish, and smooth feel of the composition as suggested by Nagatani et al. With respect to Claims 6 and 20, the reference does not explicitly teach the claimed particle thickness. However, determination of optimal or workable particle thickness by routine experimentation is obvious absent showing of criticality of the claimed parameter. One having ordinary skill in the art would have been motivated to do this to obtain the desired transparency and natural finish of the composition.

Claims 4, 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatani et al. (US 2002/0176833) as applied to claims 1-3, 5-9, 11-13, 15-17, 19-20 and 23-24 above in view of Dreher (US 2003/0157041), of record.

Nagatani et al. applied as above.

Nagatani et al. do not teach bismuth oxychloride of Claims 4 and 18.

However, Dreher teaches using plate-like bismuth oxychloride particles having an average particle size of 3-20  $\mu\text{m}$  for the same purpose as boron nitride and barium sulfate powders of Nagatani et al. See [0010]. The compositions of Dreher provide soft, translucent glowing effect to the skin, which is due to the presence of the inorganic particles. See [0010].

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the compositions of Nagatani et al. such that to use bismuth oxychloride particles instead of boron nitride or barium sulfate particles. One having ordinary skill in the art would have a reasonable expectation of obtaining the same cosmetic emollient effect as set forth in the Nagatani et al. reference because these particles are used interchangeably for the same art-recognized purpose as suggested by Dreher. Selection of a known material based on its suitability for its intended use is obvious absent a clear showing of unexpected results attributable to the applicant's specific selection. See e.g., *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

With respect to Claim 10, Nagatani et al. do not explicitly teach the particles suspended in a polar solvent prior to incorporation in the composition as claimed herein.

However, Dreher teaches making optical make-up compositions for minimizing skin flaws by first suspending bismuth oxychloride and other inorganic particles in butylene glycol (polar solvent), then adding the mixture to the water (polar solvent) and pigments mixture; and then mixing the resulting water phase (with pigment particles suspended in it) with the oily phase. See Example 1 @ pp. 2-3. The compositions of Dreher, when applied to the skin, give a high feeling of transparency, hide imperfections and give natural feeling and appearance of the skin. See [0004].

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Nagatani et al. such that to suspend their platelet particles in polar solvents before incorporating the



particle into the composition. One having ordinary skill in the art would have been motivated to do this to obtain imperfection-concealing compositions having natural skin feel and appearance as suggested by Dreher.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagatani et al. (US 2002/0176833) as applied to claims 1-3, 5-9, 11-13, 15-17, 19-20 and 23-24 above in view of Tan et al. (US 6,511,672), of record.

Nagatani et al. applied as above.

While teaching skin benefit agents, Nagatani et al. do not explicitly teach the specific benefit agents of the instant claim.

However, Tan et al. teach skin benefit agents such as vitamins (e.g. vitamin A or retinol, vitamins C and E), skin lightening agents, alpha- or beta-hydroxy acids, etc. in skin imperfection-concealing compositions. See col. 7, lines 32-64. Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the compositions of Nagatani et al. such that to employ retinol or other skin benefit agents of Tan et al. for their art-recognized purpose. One having ordinary skill in the art would have a reasonable expectation of beneficial results such as an antioxidant effect.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

#### **(10) Response to Argument**

**A prima facie case of anticipation has been established.** Appellants argue that the prima facie case of anticipation has not been established. Particularly, appellant argues

that the "In contrast, and as already made of record, the '937 reference is merely directed to transparent cosmetic compositions that reflect infrared radiation. Again, turning to column 2 of the '937 reference at lines 17-24, described is a composition that can have a diatom of a particular particle size, hollow glass microspheres, bismuth oxychloride of unspecified form, and zirconium powder covered ceramic microparticles. Appellant respectfully wishes to point out, again, that bismuth oxychloride is available in many forms and often used in cosmetics in the powdery form. Components in the powdery form are known to be opacifiers, and therefore, prohibit the radiance effect sought after and achieved in the present invention. Clearly, nothing in the '937 reference even remotely suggest or describes a skin care or cleansing composition having particles whereby the particles within a desired composition consist essentially of solid single-crystal, feat, platy particles. Moreover, nothing in the '937 reference even remotely suggests that such particles may consist of solid single-crystal, flat, platy particles."

In response, the Examiner respectfully reiterates the cosmetic of Grollier which comprises the bismuth oxychloride is transparent. Hence, the argument that the bismuth oxychloride may act as an opacifier is not persuasive. With respect to the argument that the particles of Grollier are not single-crystals, the Examiner states the prior art teaches the same platy particles, bismuth oxychloride having a diameter in the same size claimed. The crystal particles are identical hence meet the limitation single crystal and smooth-crystal facet surface. Moreover, Chemical Abstracts Services (CAS) (previously presented) teaches the same bismuth oxychloride have a Refractive Index

of 2.15. The smoothness of the bismuth oxychloride is inherent to the particles because the light scattering and reflection by the surface is identical to that claimed.

**A prima facie case of obviousness has been established.** Appellant argue that the prima facie case of obviousness has not been established. Appellant's argument over claim 14 rejection depends on the validity of the previous arguments which were not found persuasive.

With respect the arguments that the metal oxide particles of Nagatani are hollow in structure and are made of multiple crystals that are not smooth, Examiner states the reference is made up of two distinct particles: hollow plate metal oxide particles A (e.g. zirconium oxide) having an average particle diameter of 5-12  $\mu\text{m}$  and 0.01-99% by wt. of inorganic particles B (e.g. aluminum oxide, barium sulfate or boron nitride), having platy structure and a refractive index (RI) of 1.6 to 1.8 and a total transmittance of at least 85%. See [0016]-[0018], [0025], [0026], [0031], [0034], Examples. The boron nitride platy structure particles read on the claimed invention. Applicant argues the particles are used at a concentration of 20 wt%. Examiner points to paragraph[0034], wherein Nagatani teaches "The content of the component (B) in the cosmetic composition according to the present invention is preferably **0.01** to 99% by weight, particularly **0.1** to 90% by weight."

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, with respect to the Dreher, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Nagatani et al. such that to suspend their platelet particles in polar solvents before incorporating the particle into the composition. One having ordinary skill in the art would have been motivated to do this to obtain imperfection-concealing compositions having natural skin feel and appearance as suggested by Dreher. Additionally, with respect to Tan, it would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to modify the compositions of Nagatani et al. such that to employ retinol or other skin benefit agents of Tan et al. for their art-recognized purpose. One having ordinary skill in the art would have a reasonable expectation of beneficial results such as an antioxidant effect.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627

Art Unit: 1627

Conferees:

/Layla Soroush/

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